

hearted volta face.¹⁶ Clearly, there are better opportunities for both commercial and private users elsewhere.

24. The comments of numerous amateur groups show the use made of the 2300-2310 MHz segment especially, and the 2390-2400 MHz segment on an increasing basis. AMSAT comments note that any compromise in amateur's ability to utilize 2300-2310 MHz or 2390-2400 MHz will inevitably put increased pressure on the 2400-2450 MHz segment, making it less useful for amateur satellite operation. AMSAT also notes that, since an important purpose of the Omnibus Budget Reconciliation Act is to facilitate the development of "new and innovative technologies" for the benefit of the public, the Amateur and Amateur-Satellite Services provide this, by increasing use of the three 2 GHz segments at issue in this proceeding. The amateur weak-signal experiments at 2300-2310 MHz (which cannot, due to noise, be reaccommodated at either 2390-2400 or 2402-2417 MHz) have resulted in the development of high-efficiency, high-power amplifiers for these frequency bands, with efficiencies as high as 40 percent. These amplifiers are being incorporated in the Phase 3D satellite. Other 2.4 GHz technologies include low-cost, bi-directional digital video and data transmission techniques, and new spread-spectrum technologies.

¹⁶ Indeed, it is to be recalled that other land mobile representatives, in responses to the Notice of Inquiry, offered no optimism for any use of the 2390-2400 or 2402-2417 MHz segment by private users. Loral/Qualcomm, which, as noted above, seeks all of the amateur segments for mobile satellite service, had previously stated in response to the Notice of Inquiry that the 2402-2417 MHz band has "little potential for commercial services." Now Loral/Qualcomm claims just the opposite.

25. The comments of the Southern California Repeater and Remote Base Association (SCRRBA) offer a reasonable picture of the existing use of the 2300-2310 MHz and 2390-2400 MHz bands in southern California. It is obvious that any additional user in those segments would be seriously disruptive of existing, and certainly near-term future use of those segments. There are also amateur-television uses of the 2390-2400 MHz and 2402-2417 MHz segments, which are of increasing importance in view of unavailability of the 420-430 MHz segment in certain areas, and the crowding at 902-928 MHz. As noted elsewhere, amateur video plays a significant part in emergency and public service communications, especially using the 2.4 GHz band.

26. It is apparent that the highest and best use of the 2300-2310 MHz and 2390-2400 MHz segments is for continued amateur use, and that, as the Commission has noted, "there is a substantial likelihood that reallocation of the 2300-2310 MHz and 2390-2400 MHz bands to commercial or local government use could cause serious disruption to Amateur Service use of these bands."¹⁷ Because the Commission is absolutely precluded from disrupting amateur use of these bands, the Amateur Service should be given the primary allocation thereof, and any other uses should be made at a later date, after a complete study of compatibility with amateur primary use thereof.

¹⁷ FCC Report, at 18.

VI. Conclusions

27. The Commission's Notice proposal is internally inconsistent. On the one hand, it indicates an intention to protect amateur uses of the 2300-2310, 2390-2400, and 2402-2417 MHz bands. On the other, it proposes to auction the spectrum as a means of making an allocation of the bands, simply allocating them to general fixed and mobile uses. This could include just about any terrestrial use of radio imaginable. However, the comments which considered this are virtually unanimous in noting that the Commission cannot legally make frequency allocations by competitive bidding. Congress clearly did not absolve the Commission from making at least a preliminary determination of what radio services met the public interest test for the frequency allocation. Rather, it intended only that the Commission make frequency assignments with competitive bidding.

28. The Commission fairly asked in the Notice for comment from potential new users of the reallocated band segments as to the extent that such uses would be compatible with the Amateur Service. Precious few comments satisfied this obligation. The Commission can only conclude from those commenters' failure to provide an analysis of that compatibility that there is none. As a result, given the Commission's obligation under the Budget Reconciliation Act, there is no alternative but to reject these proposals for new uses, unless the Commission is prepared to itself conduct the sharing analysis that it asked the potential new users to conduct. Indeed, however, the Commission already rejected in the Notice some of the

new uses suggested by commenters. At paragraph 16 of the Notice, the Commission stated, with respect to interactive video, low power communications, mobile-satellite service, and advanced private communications, that these are accommodated in other bands, or are not suitable for the 2390-2400 MHz band.

29. Only Apple Computer and In-Flight Phone Corporation attempted in good faith to demonstrate compatibility between amateur use of the bands currently under consideration and their proposed uses. The League is interested in exploring compatible sharing opportunities with these users, though in the time available before the Commission is obligated to make an allocation decision, the details of such cannot be accommodated. For this reason, it is urged that the Amateur Service be given primary allocation status at 2300-2310 MHz, 2390-2400 MHz, and that the Amateur and Amateur-Satellite Services be given co-primary status at 2400-2417 MHz for the present. Any further determination of either Apple's PCS-data or In-Flight's AAVS as an additional user could be determined at a later date. In the meantime, the Amateur Service remains the highest and best opportunity to promote "new and innovative technologies" for the benefit of the public.

Therefore, the foregoing considered, the American Radio Relay League, Incorporated, respectfully requests that the Commission not add any additional users to the reallocated 2 GHz segments at the present time, but rather elevate the Amateur Service to primary at

2300-2310 MHz and 2390-2400 MHz, and elevate the Amateur and Amateur-Satellite Services to primary in the 2400-2417 MHz band.

Respectfully submitted,

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January 6, 1995

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